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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,384	03/15/2002	Andrea Steimer	S-31147A	5107

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EXAMINER

MEHTA, ASHWIN D

ART UNIT	PAPER NUMBER
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1638

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/088,384	Applicant(s) STEIMER ET AL.	
	Examiner Ashwin Mehta	Art Unit 1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-16 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1, 2, 4-7, 13-16, drawn to a first product, a nucleic acid having the formula RA-RB-RC, wherein RA and RC each consist of 0-6000 nucleotides, RB consists of at least 50 nucleotides, and the component sequence of RB is at least 80% identical to an aligned component sequence of SEQ ID NO: 1, or wherein the nucleic acid comprises an open reading frame encoding a protein comprising a component sequence of at least 200 amino acids at least 85% identical to an aligned component of SEQ ID NO: 10; and a first method, of selecting a plant which compared to a wild type plant is impaired in transcriptional gene silencing, comprising separately preparing RNA of a series of plants, probing said RNA preparations with said nucleic acid and identifying a plant whose RNA hybridizes with said nucleic acid.

Group II, claim(s) 1, 2, 4-6, 13-16, drawn to a second product, a nucleic acid having the formula RA-RB-RC, wherein RA and RC each consist of 0-6000 nucleotides, RB consists of at least 50 nucleotides, and the component sequence of RB is at least 80% identical to an aligned component sequence of SEQ ID NO: 2, or wherein the nucleic acid comprises an open reading frame encoding a protein comprising a component sequence of at least 200 amino acids at least 85% identical to an aligned component of SEQ ID NO: 10; and a second method, of selecting a plant which compared to a wild type plant is impaired in transcriptional gene silencing, comprising separately preparing RNA of a series of plants, probing said RNA preparations with said nucleic acid and identifying a plant whose RNA hybridizes with said nucleic acid.

Group III, claim(s) 1, 2, 4-6 13-16, drawn to a third product, a nucleic acid having the formula RA-RB-RC, wherein RA and RC each consist of 0-6000 nucleotides, RB consists of at least 50 nucleotides, and the component sequence of RB is at least 80% identical to an aligned component sequence of SEQ ID NO: 3, or wherein the nucleic acid comprises an open reading frame encoding a protein comprising a component sequence of at least 200 amino acids at least 85% identical to an aligned component of SEQ ID NO: 10; and a third method, of selecting a plant which compared to a wild type plant is impaired in transcriptional gene silencing, comprising separately preparing RNA of a series of plants, probing said RNA preparations with said nucleic acid and identifying a plant whose RNA hybridizes with said nucleic acid.

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Group IV, claim(s) 1, 2, 4-6, 13-16, drawn to a fourth product, a nucleic acid having the formula RA-RB-RC, wherein RA and RC each consist of 0-6000 nucleotides, RB consists of at least 50 nucleotides, and the component sequence of RB is at least 80% identical to an aligned component sequence of SEQ ID NO: 4, or wherein the nucleic acid comprises an open reading frame encoding a protein comprising a component sequence of at least 200 amino acids at least 85% identical to an aligned component of SEQ ID NO: 10; and a fourth method, of selecting a plant which compared to a wild type plant is impaired in transcriptional gene silencing, comprising separately preparing RNA of a series of plants, probing said RNA preparations with said nucleic acid and identifying a plant whose RNA hybridizes with said nucleic acid.

Group V claim(s) 1, 2, 4-7, 13-16, drawn to a fifth product, a nucleic acid having the formula RA-RB-RC, wherein RA and RC each consist of 0-6000 nucleotides, RB consists of at least 50 nucleotides, and the component sequence of RB is at least 80% identical to an aligned component sequence of SEQ ID NO: 5, or wherein the nucleic acid comprises an open reading frame encoding a protein comprising a component sequence of at least 200 amino acids at least 85% identical to an aligned component of SEQ ID NO: 10; and a fifth method, of selecting a plant which compared to a wild type plant is impaired in transcriptional gene silencing, comprising separately preparing RNA of a series of plants, probing said RNA preparations with said nucleic acid and identifying a plant whose RNA hybridizes with said nucleic acid.

Group VI, claim(s) 1, 2, 4-6, 13-16, drawn to a sixth product, a nucleic acid having the formula RA-RB-RC, wherein RA and RC each consist of 0-6000 nucleotides, RB consists of at least 50 nucleotides, and the component sequence of RB is at least 80% identical to an aligned component sequence of SEQ ID NO: 6, or wherein the nucleic acid comprises an open reading frame encoding a protein comprising a component sequence of at least 200 amino acids at least 85% identical to an aligned component of SEQ ID NO: 10; and a sixth method, of selecting a plant which compared to a wild type plant is impaired in transcriptional gene silencing, comprising separately preparing RNA of a series of plants, probing said RNA preparations with said nucleic acid and identifying a plant whose RNA hybridizes with said nucleic acid.

Group VII, claim(s) 1-7, 13-16, drawn to a seventh product, a nucleic acid having the formula RA-RB-RC, wherein RA and RC each consist of 0-6000 nucleotides, RB consists of at least 50 nucleotides, and the component sequence of RB is at least 80% identical to an aligned component sequence of SEQ ID NO: 7, or wherein the nucleic acid comprises an open reading frame encoding a protein comprising a component sequence of at least 200 amino acids at least 85% identical to an aligned component of SEQ ID NO: 10; and a seventh method, of selecting a plant which compared to a wild type plant is impaired in transcriptional gene silencing, comprising separately preparing RNA of a series of plants, probing said RNA preparations with said nucleic acid and identifying a plant whose RNA hybridizes with said nucleic acid.

Group VIII, claim(s) 1, 2, 4-6, 13-16, drawn to an eighth product, a nucleic acid having the formula RA-RB-RC, wherein RA and RC each consist of 0-6000 nucleotides, RB consists of at least 50 nucleotides, and the component sequence of RB is at least 80% identical to an aligned component sequence of SEQ ID NO: 8, or wherein the nucleic acid comprises an open reading

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frame encoding a protein comprising a component sequence of at least 200 amino acids at least 85% identical to an aligned component of SEQ ID NO: 10; and an eighth method, of selecting a plant which compared to a wild type plant is impaired in transcriptional gene silencing, comprising separately preparing RNA of a series of plants, probing said RNA preparations with said nucleic acid and identifying a plant whose RNA hybridizes with said nucleic acid.

Group IX, claim(s) 1-7, 13-16, drawn to a ninth product, a nucleic acid having the formula RA-RB-RC, wherein RA and RC each consist of 0-6000 nucleotides, RB consists of at least 50 nucleotides, and the component sequence of RB is at least 80% identical to an aligned component sequence of SEQ ID NO: 9, or wherein the nucleic acid comprises an open reading frame encoding a protein comprising a component sequence of at least 200 amino acids at least 85% identical to an aligned component of SEQ ID NO: 10; and a ninth method, of selecting a plant which compared to a wild type plant is impaired in transcriptional gene silencing, comprising separately preparing RNA of a series of plants, probing said RNA preparations with said nucleic acid and identifying a plant whose RNA hybridizes with said nucleic acid.

Group X, claim(s) 1-7, 13-16, drawn to a tenth product, a nucleic acid having the formula RA-RB-RC, wherein RA and RC each consist of 0-6000 nucleotides, RB consists of at least 50 nucleotides, and the component sequence of RB is at least 80% identical to an aligned component sequence of SEQ ID NO: 27, or wherein the nucleic acid comprises an open reading frame encoding a protein comprising a component sequence of at least 200 amino acids at least 85% identical to an aligned component of SEQ ID NO: 27; and a tenth method, of selecting a plant which compared to a wild type plant is impaired in transcriptional gene silencing, comprising separately preparing RNA of a series of plants, probing said RNA preparations with said nucleic acid and identifying a plant whose RNA hybridizes with said nucleic acid.

Group XI, claim(s) 8-12, drawn to an eleventh method, of producing DNA representing at least part of a gene necessary to maintain silencing of another gene in a cell or plant.

The inventions listed as Groups I-XI do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Each of Groups I-X are drawn to different nucleotide sequences that have distinct sequences, and are not shared with other groups. The nucleotide sequences of each of Groups I-X are not shared with the method of Group XI.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

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Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Contact Information

Any inquiry concerning this communication from the Examiner should be directed to Ashwin Mehta, whose telephone number is 571-272-0803. The Examiner can normally be reached from 8:00 A.M to 5:30 P.M. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Amy Nelson, can be reached at 571-272-0804. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9307 for After Final communications. Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>.

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July 9, 2004



Ashwin D. Mehta, Ph.D.
Primary Examiner
Art Unit 1638